#### 【実用新案登録請求の範囲】

【請求項1】 加圧洗浄水を、便器ボウル面の水通し棚に沿って互いに同一の周方向に吐水する2つの洗浄水吐水口を相対向する位置に備えてなることを特徴とする簡易水洗便器。

【請求項2】 水通し棚を、間隔を置いて洗浄水吐水口の下部に配設してなる請求項1の簡易水洗便器。

#### 【図面の簡単な説明】

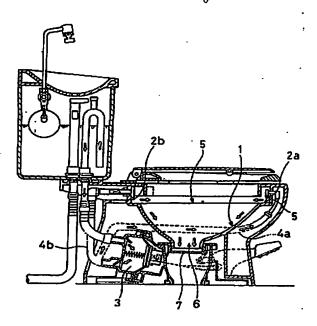
【図1】この考案の一実施例を示した側断面図である。

【図2】この考案の簡易水洗便器における洗浄水の流水 状態を例示した平面図である。

【図3】この考案における洗浄水の好ましい流水状態を例示した断面斜視図である。

【図4】従来の簡易水洗便器を例示した側断面図であ

[2] Fig. ]



る。

【図5】従来例における洗浄水の流水状態を例示した平面図である。

【図6】従来例における使用時の状態を例示した要部切 欠側面図である。

#### 【符号の説明】

1 ボウル面

2a、2b 洗浄水吐水口

3 加圧タンク

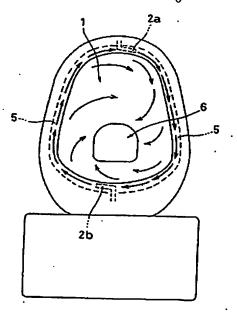
4 a 、4 b 配水パイプ

5 水通し棚

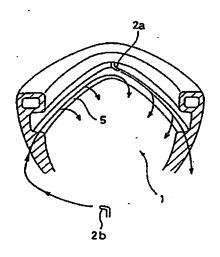
6 排水口

7 フラップ弁

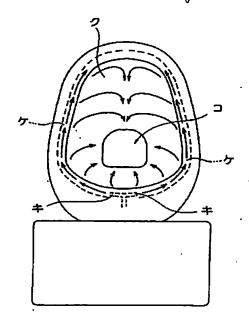
[2] Fig. 2



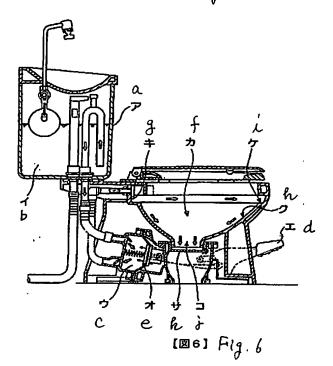
ε, β;Η [EB]

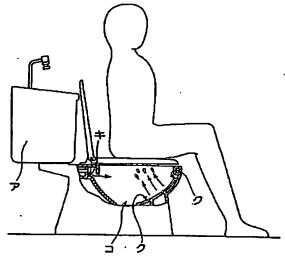


[图5] Fig.5



[24] Fig. 4





### (Translation of JP 05-61272)

Japanese Utility Model Examined Publication No. 05-61272

Publication Date: August 13, 1993

Japanese Utility Model Application No. 04-2356

Application Date: January 27, 1992

Applicant: MATSUSHITA ELECTRIC WORKS

Title of the Utility Model: SIMPLE FLUSH TOILET

# [Abstract]

[Purpose]

To provide a simple flush toilet with an excellent cleansing ability, which is capable of streaming the bowl surface over a wide range, without the going up and the spatter of the cleansing water, even when spouting the cleansing water with a high pressure.

[Structure]

A simple flush toilet comprising two cleansing water spouts 2a, 2b, located at mutually opposed positions, for spouting pressurized cleansing water in a same circumferential direction along a water-through shelf 5 of a toilet bowl surface 1.

#### Claims

- 1. A simple flush toilet comprising two cleansing water spouts, located at mutually opposed positions, for spouting pressurized cleansing water in a same circumferential direction along a water-through shelf of a toilet bowl surface.
- 2. The simple flush toilet according to claim 1, wherein said water-through shelf is provided through a space below said cleansing water spouts.

[Detailed Explanation of the Device]

[0001]

[Industrial Application]

The present device relates to a simple flush toilet. More specifically, the present device relates to the dipping-up type simple flush toilet that demonstrates an outstanding cleansing ability with a small amount of cleansing water.

[0002]

## [Description of the Prior Art]

Conventionally, the seated type flush toilets having various designs and structures have been known, and for example, the dipping-up type flush toilets such as shown in Figure 4 have been also used widely.

In the case of this simple flush toilet, a reservoir water (b) in a tank (a) is directed into a pressure tank (c), and is pressurized by a pump (e) interlocked with a pedal (d), and is spouted from cleansing water spouts (g) provided at an upper part within a toilet bowl (f) towards a bowl surface (h) in a horizontal direction, along a water-through shelf (i) of the bowl surface (h). The cleansing water flowing through the water-through shelf (i) flows down into the bowl surface (h) one by one, and flushes the bowl surface, and is discharged from a flap valve (k) at the exhaust port (j) with waste.

As explained above, because the simple flush toilet pressurizes the cleansing water, and then spouts the same, it has an outstanding feature such that the bowl surface can be widely cleansed with the small amount of water comparing with a wash-out type flush toilet, etc.

[0004]

[Problem to be Solved by the Device]

However, in the case of such conventional simple flush toilet, because it is configured to spout the pressurized cleansing water from the cleansing water spouts (g) to the left and right along the water-through shelf (i), for example, as a stream state thereof being shown with the arrows in Figure 5, the cleansing water falls down from the water-through shelf (i) on the left and right one by one, each collides at the center section of the bowl surface (h), and thus loses a flow strength thereof. As a result, an effective cleansing surface of the cleansing water flowing down from the water through shelf (i) on the left and right sides has been only in a half of the bowl surface (h).

On the other hand, in the above-explanied simple flush toilet, the cleansing ability becomes larger as an spouting water pressure of cleansing water becomes higher, but as described above, because the cleansing water falling down from the water-through shelf (i) on the left and right each collides at the center section thereof, if the spouting water pressure would be increased, then as shown in Figure 6, the cleansing water goes up at the time of the collision, and there is a possibility that the water-drops may spatter to a user's

skin and clothes. As a result, there is a limit in the spouting water pressure of the cleansing water which can be used, and thus it has been difficult to make the cleansing ability much more larger one.

[0006]

In order to solve the problems of the conventional simple flush toilet, it is an object of the present device to provide a simple flush toilet with an excellent cleansing ability, which is capable of streaming the bowl surface over a wide range, without the going up and the spatter of the cleansing water, even when spouting the cleansing water with a high pressure.

[0007]

[Means for Solving the Problem]

The present device provides a simple flush toilet comprising two cleansing water spouts, located at mutually opposed positions, for spouting pressurized cleansing water in a same circumferential direction along a water-through shelf of a toilet bowl surface, as the one for solving the above-mentioned problems.

The water-through shelf is preferably provided through a space below the cleansing water spouts.

[8000]

[Operation]

In the simple flush toilet of the present device, since the pressurized cleansing water is spouted from two cleansing water spouts at mutually opposed positions of the toilet bowl side in the same circumferential direction along the water-through shelf, the cleansing water flows down while whirling over an entire boil surface, without being collided.

[0009]

As a result, a large cleansing ability may be obtained by making a spout pressure of the cleansing water higher, without a possibility of spattering the water drops, while turning an effective cleansing surface area of the cleansing water larger.

[0010]

[Embodiment]

The simple flush toilet of the present device will be described in details, as showing an embodiment thereof along with the accompanying drawings.

Figure 1 is a side sectional view showing an embodiment of the present device.

For example, as shown in Figure 1, in the case of the simple flush toilet of the present device, the cleansing water spouts (2a) (2b) are provided at the mutually opposed positions at the front and the rear of the toilet bowl surface (1), respectively. Then, the cleansing water pressurized in the pressure tank (3) is distributed to two water distribution pipes (4a) (4b), and is spouted from each of the cleansing water spouts (2a) (2b), along with a water through shelf (5). [0011]

Since each of the cleansing water spouts (2a) (2b) is configured to spout the cleansing water only in the same circumferential direction, these cleansing water each flows down one by one from the water through shelf (5) on each side, and cleanses the bowl surface, and then it is discharged from a lap valve (7) of an exhaust port (6) along with the waste.

Figure 2 is a plan view illustrating a stream state of the cleansing water in the simple flush toilet of the present device shown in Figure 1.

## [0012]

For example, as shown in Figure 2, in the toilet of the present device, each of two cleansing water spouts (2a) (2b) is configured to spout the cleansing water to a leftward of the circumference of the toilet bowl toward the exhaust port (6).

As a result, as shown with an arrow in the figure, the cleansing water flows down over an entire bowl surface (1), with whirling, without colliding mutually and losing a water force, and without spattering the water drops.

### [0013]

Further, in the simple flush toilet of the present device, also as illustrated in Figure 3, it is preferable to provide the water-through shelf (5) of the circumference of the bowl surface (1) at the location below the cleansing water spouts (2a) (2b). As such, locating the water-through shelf (5) below the cleansing water spouts (2a) (2b), the cleansing water spouted from the one (2b) of the cleansing water spouts (2a) (2b) flows through the water-through shelf (5) without being interfered with the other (2a) of the cleansing water spouts (2a) (2b). As a result, the cleansing water flows down the bowl surface (1) without pausing, thereby forming a good whirling state.

### [0014]

Of course, the present device is not limited to the aforementioned embodiment, and the various embodiments may be possible for the details thereof.

[0015]

[Effect of the Device]

As explained above in detail, according to the present device, a large cleansing ability, which is capable of streaming the cleansing water with the high pressure over the wide range of entire bowl surface, without the going up and the spatter of the cleansing water.

[Brief Description of the Drawings]

Figure 1 is a side sectional view showing one embodiment of the present device;

Figure 2 is a plan view illustrating a stream state of the cleansing water in the simple flush toilet of the present device;

Figure 3 is a cross sectional perspective view illustrating a preferable stream state of the cleansing water in the present device;

Figure 4 is a side sectional view illustrating a conventional simple flush toilet;

Figure 5 is a plan view illustrating a stream state of the cleansing water in the conventional example; and

Figure 6 is a side partially sectional view illustrating a state in use in the conventional example.

[Explanation of Reference Numerals]

- 1 Bowl surface
- 2a, 2b Cleansing water spout
- 3 Pressure tank
- 4a, 4b Water distribution pipe
- 5 Water-through shelf
- 6 Exhaust port
- 7 Flap valve